

SYSTEM AND METHOD FOR PROVIDING A UNIFORM OXIDE LAYER OVER A
LASER TRIMMED FUSE WITH A DIFFERENTIAL WET ETCH STOP TECHNIQUE

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ABSTRACT OF THE DISCLOSURE

A system and method is disclosed for using a differential wet etch stop technique to provide a uniform oxide layer over a metal layer in a laser trimmed fuse. A layer of boron doped oxide with a slow etch rate is placed over the metal layer. A layer of
10 phosphorus doped oxide with a fast etch rate is placed over the boron doped oxide. The time period required for a wet etch process to etch through the phosphorus doped oxide is calculated. The wet etch process is then applied to the phosphorus doped
15 oxide for the calculated time period. The wet etch process slows significantly when it reaches the boron doped oxide. This method forms a uniform layer of boron doped oxide over the metal layer.